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1 5. (Original) The power control system of claim 4, wherein the adjustable
2 buck voltage converter reduces supply current to the power amplifier until saturation of the
3 power amplifier is detected.

1 6. (Original) The power control system of claim 1, wherein the secondary
2 control signal is used to control the variable attenuator to reduce attenuation in the first
3 power control loop, and further comprising:

4 an adjustable buck voltage converter responsive to the secondary control signal, the
5 adjustable buck voltage converter configured to reduce the power supplied to the power
6 amplifier in response to the secondary control signal until saturation of the power amplifier
7 is detected.

1 7. (Currently amended) A method for operating a power control loop for a
2 power amplifier, comprising:

3 measuring a power level of a signal output from the power amplifier;

4 generating an error signal by comparing the power level of the signal output from the
5 power amplifier to a first reference signal;

6 generating a primary control signal responsive to the error signal in a primary control
7 loop; and

8 deriving a secondary control signal responsive to the error signal and a second
9 reference signal, and

using the secondary control signal to control a gain
 applied to the signal output from the amplifier.

1 8. (Original) The method of claim 7, further comprising:

2 using the secondary control signal to control a gain applied to the signal output from
3 the power amplifier.

1 9. (Original) The method of claim ⁷8, wherein the gain applied to the signal
2 output from the power amplifier is controlled by a variable attenuator, the variable attenuator
3 configured to receive the signal output from the power amplifier.

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1 10. (Original) The method of claim 7, further comprising:
2 using the secondary control signal to control an adjustable buck voltage converter,
3 the adjustable buck voltage converter configured to provide a supply current to the power
4 amplifier.

1 11. (Original) The method of claim 10, wherein the adjustable buck voltage
2 converter reduces supply current to the power amplifier until saturation of the power
3 amplifier is detected.

1 12. (Original) The method of claim 7, further comprising:
2 using the secondary control signal to control a gain applied to the signal output from
3 the power amplifier; and
4 using the secondary control signal to control an adjustable buck voltage converter,
5 the adjustable buck voltage converter configured to provide a supply current to the power
6 amplifier, wherein the adjustable buck voltage converter reduces supply current to the power
7 amplifier until saturation of the power amplifier is detected.

1 13. (Currently amended) A system for operating a power control loop for a
2 power amplifier, comprising:
3 means for measuring a power level of a signal output from the power amplifier;
4 means for generating an error signal by comparing the power level of the signal
5 output from the power amplifier to a first reference signal;
6 means for generating a primary control signal responsive to the error signal in a
7 primary control loop; and
8 means for deriving a secondary control signal responsive to the error signal and a
9 second reference signal, and

1 14. (Original) The system of claim 13, further comprising:
2 means for using the secondary control signal to control a gain applied to the signal
3 output from the power amplifier.

*means for using the secondary control signal to control
a gain applied to the signal output from the amplifier.*

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1 15. (Original) The system of claim 14, wherein the gain applied to the signal
2 output from the power amplifier is controlled by a variable attenuator means, the variable
3 attenuator means for receiving the signal output from the power amplifier.

1 16. (Original) The system of claim 13, further comprising:
2 means for using the secondary control signal to control an adjustable buck voltage
3 converter means, the adjustable buck voltage converter means for providing a supply current
4 to the power amplifier.

1 17. (Original) The system of claim 16, wherein the adjustable buck voltage
2 converter means reduces supply current to the power amplifier until saturation of the power
3 amplifier is detected.

1 18. (Original) The system of claim 13, further comprising:
2 means for using the secondary control signal to control a gain applied to the signal
3 output from the power amplifier; and
4 means for using the secondary control signal to control an adjustable buck voltage
5 converter means, the adjustable buck voltage converter means for providing a supply current
6 to the power amplifier, wherein the adjustable buck voltage converter means reduces supply
7 current to the power amplifier until saturation of the power amplifier is detected.

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